Government Project Proposal for ***"Development of Smart Organic Farming Model in Pune District, Maharashtra."***

Client: ABC Agro Innovations Pvt. Ltd.

Location: Hinjewadi, Pune, Maharashtra

Target Scheme: Rashtriya Krishi Vikas Yojana (RKVY) / National Mission on Sustainable Agriculture (NMSA)

Background: ABC Agro Innovations Pvt. Ltd. has been operating in the agricultural sector for the past 8 years, focusing on sustainable and organic farming practices. The firm intends to implement a "Smart Organic Farming Model" in 200 hectares across Pune District, integrating precision farming, IoT-enabled monitoring, and organic certification. To scale this initiative effectively, the company seeks government funding under schemes promoting sustainable agriculture and agri-technology adoption.

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"Development of Smart Organic Farming Model: Integration of IoT & Precision Agriculture in Pune District"

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1.0 EXECUTIVE SUMMARY

1.1 Project Title

Development of Smart Organic Farming Model in Pune District. The proposed project aims to develop a technology-driven, fully organic farming model over 200 hectares in Pune district, Maharashtra. The model integrates IoT-enabled precision agriculture with traditional organic practices to increase productivity, reduce input costs, and establish a traceable farm-to-fork supply chain.

1.2 Applicant Agency: ABC Agro Innovations Pvt. Ltd.

- Legal Status: Private Limited Company (Agri-Tech & Organic Agriculture Consultancy)
- CIN: [Insert Number]
- GST/PAN: [Insert Numbers]
- Udyam Registration: [Insert Number]

Organizational Vision: To transform traditional farming clusters into smart organic ecosystems by leveraging modern technology while maintaining ecological sustainability.

Core Competencies:

- Organic agriculture consultancy
- Precision agriculture & IoT deployment
- Agri-business development and market linkages
- Farmer training and capacity building

1.3 Project Location: Hinjewadi & Surrounding Clusters, Pune District, Maharashtra

- Total Area: 200 Hectares

- Land Type: Agricultural lands under smallholder and mid-sized farms, suitable for crop rotation of cereals, vegetables, and horticulture crops.
- Cluster Selection Rationale: Proximity to Pune city ensures easy access to markets, technical support from universities (e.g., MPKV Rahuri), and availability of farm labor.

Figure 1.1: *Map Showing Proposed Project Clusters in Pune District*
([Placeholder for GIS-based cluster map showing Hinjewadi and surrounding villages])

1.4 Key Objectives

Objective	Description	Target Metric
Transition to Certified Organic	Convert 200 hectares to NPOP-compliant certified organic farms	200 Ha fully certified
IoT-Based Precision Agriculture	Install soil moisture sensors, automated weather stations, and smart irrigation systems	1 sensor per 5 Ha, 3 AWS units, 100% coverage of farm plots
Farm-to-Fork Traceability	Develop QR-code-based consumer transparency system	100% of produce traceable from farm to retail

The project emphasizes the integration of traditional organic practices with digital precision agriculture, ensuring resource efficiency, environmental sustainability, and enhanced farmer incomes. The IoT sensors will provide real-time monitoring for soil health, irrigation, and microclimatic conditions, while certification and traceability components will strengthen market credibility and consumer trust.

1.5 Financial Summary

Financial Component	Amount (₹ Lakhs)	% of Total Cost
Total Project Cost	150.00	100%
Grant-in-Aid Requested	100.00	66%
Promoter Contribution	50.00	34%

The total project cost of ₹1.5 Crores covers capital investment (IoT infrastructure, bio-input

production units, farm machinery), operational costs (certification, training, manpower), and market development (traceability software, marketing). The grant request of ₹1 crore will primarily support the technology demonstration and infrastructure setup, while the promoter contribution of ₹50 lakhs ensures project ownership and co-investment by ABC Agro Innovations.

1.6 Project Duration

- Total Duration: 24 months (2 years)
- Implementation Phases:
    1. Phase I (Months 1–6): Cluster selection, farmer mobilization, baseline surveys, and IoT infrastructure installation
    2. Phase II (Months 7–18): Crop cycles under organic conversion, real-time monitoring, and capacity building for farmers
    3. Phase III (Months 19–24): Certification, brand development, and market launch

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1.7 Expected Impact

Impact Area	Target Outcome
Yield Improvement	20% increase in crop yields within 2 years
Input Efficiency	15% reduction in water and fertilizer usage
Employment Generation	50 new jobs for local farmers and youth
Environmental Benefit	Improved soil health (increase in Soil Organic Carbon) and reduction in chemical input usage
Market Advantage	Enhanced market access and premium pricing due to certified organic produce with traceability

This project is expected to create a replicable model for smart organic agriculture, benefiting small and mid-scale farmers while promoting sustainability and climate-resilient farming. The integration of IoT and precision agriculture ensures data-driven decision-making, optimizing

resource use and minimizing environmental impact. Certification and traceability will unlock higher market prices, enhancing profitability and promoting sustainable livelihoods.

Figure 1.2: *Conceptual Framework of Smart Organic Farming Model*
([Placeholder for diagram showing IoT sensors → farm monitoring → organic production → certified produce → consumer via QR traceability])

2.0 Applicant Profile & Institutional Capability

2.1 Organization Details

Contact us for Full Report….